
Oracle11g INTRODUCTION TO PL/SQL

Duration: 2 days

Use Oracle 11g PL/SQL to extract and process data, and develop database triggers, stored procedures, and functions for future reuse.

Course Description:

You will receive a hands-on introduction to the Oracle11g PL/SQL procedural language for SQL. You will cover how to insert, update, and delete data, control data sharing and locking, debug and use error report procedures, and develop database triggers, stored procedures and functions for future reuse.

You can learn ...

- The PL/SQL Environment and Program Structure
- Update, Insert and Delete Statements
- Error Report Functions
- Debugging Procedures
- Logical Comparisons
- To define, store and Execute Procedures
- To define, store and execute Functions
- To create Package Specifications and Package Bodies
- To create composite datatypes
- To work with implicit and explicit cursors

Who Needs to Attend:

Anyone who needs to extract and organize information from an Oracle database, including adding, updating, and deleting data, and debug and use error report procedures, and develop database triggers, stored procedures and functions for future reuse. I.E. Application designers, developers, database administrators, and End Users.

Prerequisites:

Oracle 11g Foundation: SQL Basics & SQL*PLUS or equivalent experience.

Course Labs:

1. Using PL/SQL to create an Anonymous Block
2. PL/SQL Basics
3. Selecting and Updating Database Data
4. Using Explicit Cursors
5. Handling Exceptions
6. Creating a Procedure
7. Creating a Function
8. Creating a Package
9. Creating a Database Trigger

Course Content:

1. PL/SQL BASICS

- SQL and PL/SQL
- PL/SQL anonymous block structure and Datatypes
- Variable declarations
- Object naming rules
- Executable Statements
- Operators in PL/SQL
- Repetition control
- LOOP statements – Basic LOOP, WHILE, FOR
- CASE Expressions and Statements
- Nested Blocks
- Labels and block identification
- Basic Coding Standards
- SQL*PLUS development environment

2. WORKING WITH DATABASE DATA

- SELECT statements in PL/SQL
- Selecting single and multiple rows
- Referencing other variables or a database column's datatypes
- Modifying database data (DML)
- Transaction control commands
- Selecting data into PL/SQL variables
- Explicit cursors
- Transaction control commands
- Referencing other structures datatypes
- Using the cursor FOR LOOP
- FOR UPDATE / WHERE CURRENT OF

3. EXCEPTION HANDLING

- Writing an exception handler section
- Handling predefined and user-defined exceptions
- Controlling exception processing
- Preventing unhandled exceptions
- RAISE_APPLICATION_ERROR
- Using SQLCODE and SQLERRM

4. STORED PL/SQL OBJECTS

- Introduction to procedures and functions stored in the database
- Creating stored PL/SQL objects
- Passing values with parameters
- Creating procedures, functions, packages, package bodies
- Introduction to database triggers
- Viewing and recompiling stored code